

Page 6, above the second paragraph, insert

-- Brief Description of the Drawings: --;

above the last paragraph, insert

-- Description of the Preferred Embodiments: --.

Page 12, top, change "Patent claims" to -- We claim: --.

In the Claims:

sub B1
A2
Claim 3 (amended). The method as claimed in claim 1, the surface inspection system (6) being an arrangement having a plurality of sensors, in particular cameras, with downstream image analysis systems.

Claim 4 (amended). The method as claimed in claim 1, the investigation for correlations between production data and product data being in particular a correlation program known per se, which considers the entropy in the data space and detects correlations by finding data constellations with minimal entropy.

Claim 5 (amended). The method as claimed in claim 1, the surface inspection system (6) analyzing the surface data online or offline, so that the product data are already available during production and detected correlations can be

used directly for setting production parameters to achieve or maintain a predeterminable quality.

Claim 6 (amended). The method as claimed in claim 1, in which, after detection of certain correlations in the first or second data processing unit, production data or product data which do not show any correlations are filtered out and excluded from the further processing in the third data processing unit (11).

Claim 7 (amended). The method as claimed in claim 1, specific production data or product data being passed on in the first data processing unit (5) or second data processing unit (8) without prior analysis, filtering or processing to the third data processing unit (11), to allow possible correlations with these unprocessed data to be found.

A3- Claim 10 (amended). The device as claimed in claim 8, the surface inspection system (6) being an arrangement having a plurality of sensors, in particular cameras, with a downstream image analysis system (7).

Claim 11 (amended). The device as claimed in claim 8, the correlation module (12) containing for the investigation of correlations between production data and product data a correlation program which considers the entropy in the data

space and detects correlations by finding data constellations with minimal entropy.

Claim 12 (amended). The device as claimed in claim 8, the output of the third data processing unit (11) being connected (14) to closed-loop and open-loop control devices for the production process, to make possible an automatic or semiautomatic feedback and conversion of the correlation results into the production process.

A3
Contro
Claim 13 (amended). The device as claimed in claim 8, the first, second and third data processing units (5, 8, 11) being arranged spatially apart from one another.

Claim 14 (amended). The device as claimed in claim 8, the first, second and third data processing units (5, 8, 11) being integrated into a common data processing center.

Remarks:

The preliminary amendment is being filed in an effort to present an application in proper U.S. format and to eliminate multiple dependencies in the claims.